



STATUS REPORT

Progress and Improvements

DPW BUREAU/OFFICE Back River Wastewater Treatment Plant (Back River)

Date 12/23/2022

Parameters	Week ending 12/12/22	Week ending 12/19/22	Weekly Permit limit	Meeting Requirement
Total Suspended Solids (TSS)	2.3 mg/l	3.5 mg/l	15 mg/l	Yes
Biochemical oxygen demand (BOD)	3.6 mg/l	3.2 mg/l (2 days)	15 mg/l	Yes
Total phosphorus (TP)	<0.10 mg/l	0.12 mg/l	0.30 mg/l	Yes
Ammonia (NH3)	0.40 mg/l	0.25 mg/l	N/A	N/A
Total nitrogen (TN)	3.3 mg/l	3.0 mg/l	4.0 mg/l	Yes
E-coli	11 MPN/100 ml	10 MPN/100 ml	126 MPN/100 ml	Yes

MPN = Most Probable Number

NOTE: WEEKLY AMMONIA PERMIT IS SEASONAL FROM 5/1-10/31. THERE IS NO WEEKLY PERMIT LEVEL OTHERWISE

Maintenance Updates

Maintenance staff continues to focus on the preventive maintenance (PM) of the process areas.

In-Ground Digester cleaning and repairs for #1 are nearing completion, approximately end of December. In-Ground digester #4 will be done after #1 with a completion in February 2023. The contract for rehabilitation of all remaining digesters, in ground and egg shaped, is being processed for award. Notice to proceed on that contract will be in the first quarter of 2023. The digestion process reduces the amount of biosolids requiring treatment prior to removal while improving methane production for the plant co-generation efforts which supply power to the plant facilities.

Primary Settling Tank (PST #7) was tested with flushing water to ensure proper operation. Minor adjustments were needed. When completed, this PST will be placed in service. Timeline is end of December. The focus will then shift to repairs of PST #2 and #9, which will tentatively return to service by February 2023.

Centrifuge #3 has been placed into service. Centrifuge #2 is having regular maintenance conducted at this time, leaving #1 and #3 in-service/available. Centrifuge #4 is awaiting delivery of a shaft and bowl which will then be installed and providing the City with four operational centrifuges.

Summary

DPW has made substantial progress toward full compliance at Back River. More specifically, suspended solids, biochemical oxygen demand, total phosphorus, ammonia, and total nitrogen have decreased significantly since

March 2022. **All monthly parameters are currently under permit limits and Back River has maintained compliance since June.**

DPW recognizes that Back River is a valuable asset to the Baltimore region and we are excited about the path forward to sustained compliance.